

MID-YEAR REVIEW

INEEL LARGE SCALE DEMONSTRATION AND DEPLOYMENT PROJECT

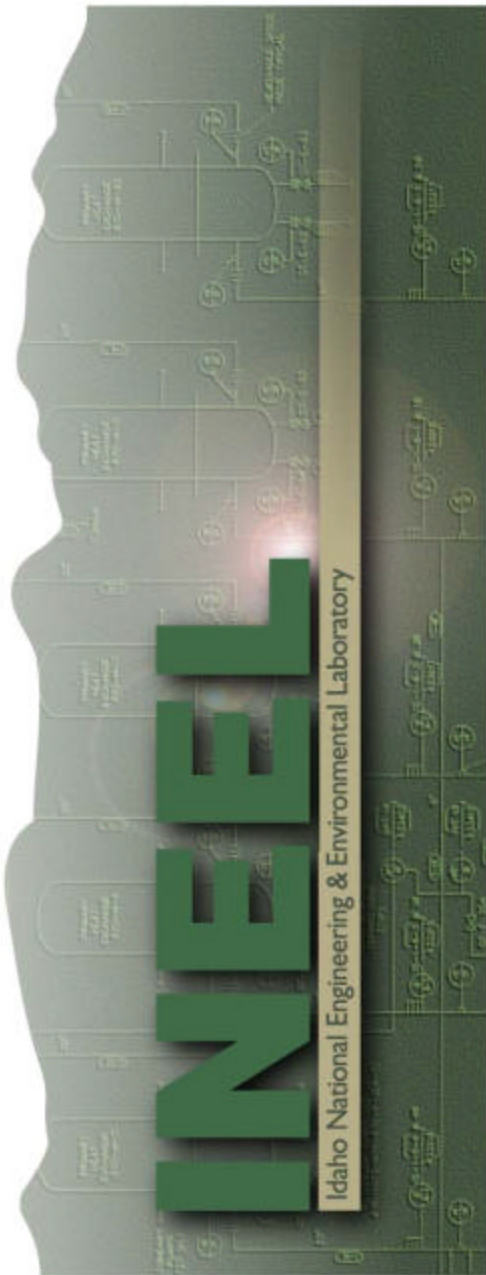
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D&D Focus Area

April 17-19, 2001

National Energy Technology Laboratory



Technology Acronyms

- **SSWPS** *Soft-Sided Waste Packaging System*
- **RUCS** *Remote Underwater Characterization System*
- **LPA** *Lead Paint Analyzer*
- **Aly Anal** *Alloy Analyzer*
- **Spectro Xepos** *PCB Analyzer*
- **Excel** *Excel Automatic Locking Scaffolding*
- **Paint Scaler** *Paint Scaler*
- **SAMS** *Surveillance And Monitoring System*
- **ISUGS** *In-Situ Underwater Gamma Spectroscopy*
- **GLD** *Gamma Locating Device*
- **GPRS** *Global Positioning Radiometric Scanner*
- **IFR** *ISOCs for Free Release*
- **Cu Recycle** *Copper Recycling*
- **En-Vac** *Robotic Wall Grit Scabbler*
- **EMR** *Electro-Magnetic Radiography*
- **IID** *Isotopic Identification Device*
- **Stair Climber** *Stair Climbing Hand Truck*

Communications

- *Fact sheets issued within 10 days*
- *Over 600 individuals notified of publishing of fact sheets*
- *Innovative Technology Summary Reports (ITSR)
published within 90 days (same distribution as fact sheets)*
- *Web Site: <http://id.inel.gov/lstdp>*
- *Papers presented at Spectrum '00, ICONE 8, ISU
Environmental Conference, ANS Winter Conference, and IDS
2000*
- *Trade show booth at Spectrum '00, IDS 2000*
- *Videos*
- *CD's*

Demonstration Status

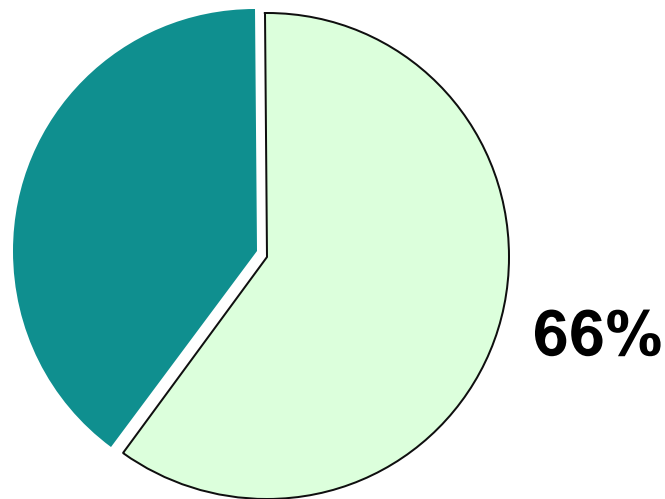
- ***Over 300 technologies reviewed***
- ***141 technologies screened***
- ***35 technologies selected for more detailed evaluation***
- ***26 technologies approved for demonstration***
- ***14 technologies demonstrated***
- ***3 technologies scheduled for demonstration***

Technology Deployment Status

- ***14 demonstrated***
- ***2 deployed 1 time***
- ***8 deployed multiple times***
- ***1 deployed at multiple sites***
- ***8 became baseline at INEEL***

*** Word is now reaching other sites**

New technologies become baseline at INEEL



- ***RUCS***
- ***Lead Paint Analyzer***
- ***Soft-Sided Containers***
- ***Excel Scaffolding***
- ***SAMS***
- ***Paint Scaler***
- ***GPRS***
- ***Spectro Xepos***

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Remote Underwater Characterization System (RUCS)



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Niton[®] Lead Paint Analyzer (LPA)



Soft Sided Waste Packaging System (SSWPS)



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Excel Automatic Locking Scaffold System



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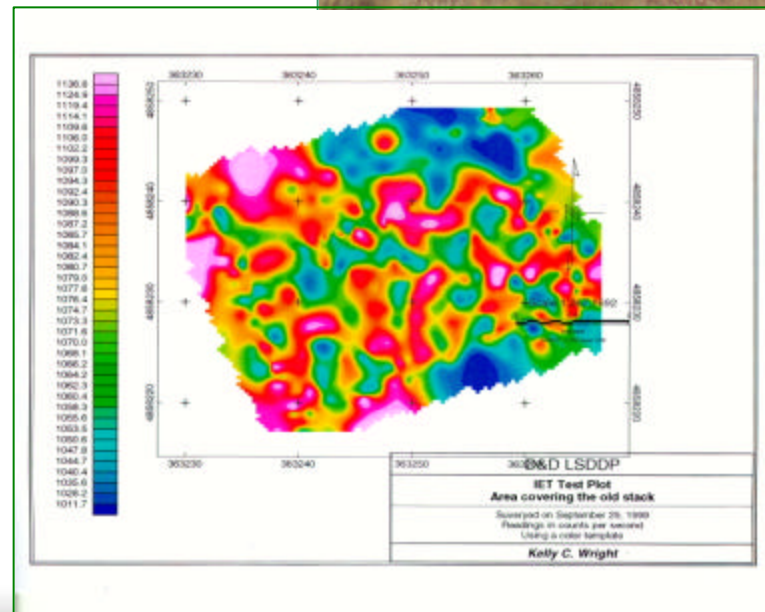
Surveillance and Measurement System (SAMS)



Paint Scaler- Bosch Rotary Hammer Drill



Global Positioning Radiometric Scanner



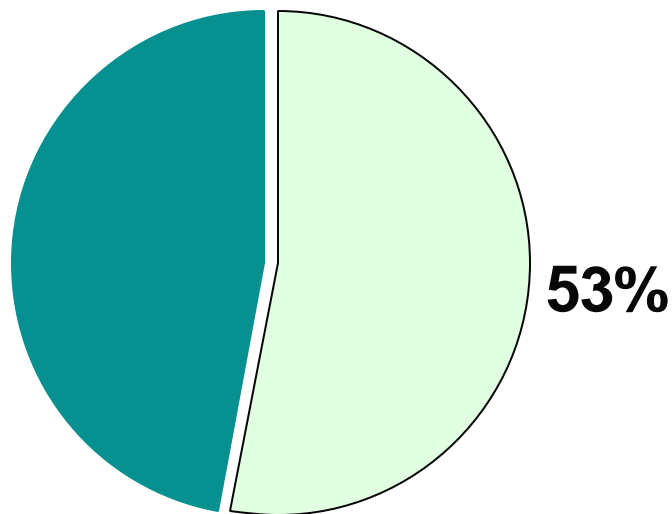
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Spectro Xepos XRF Analyzer



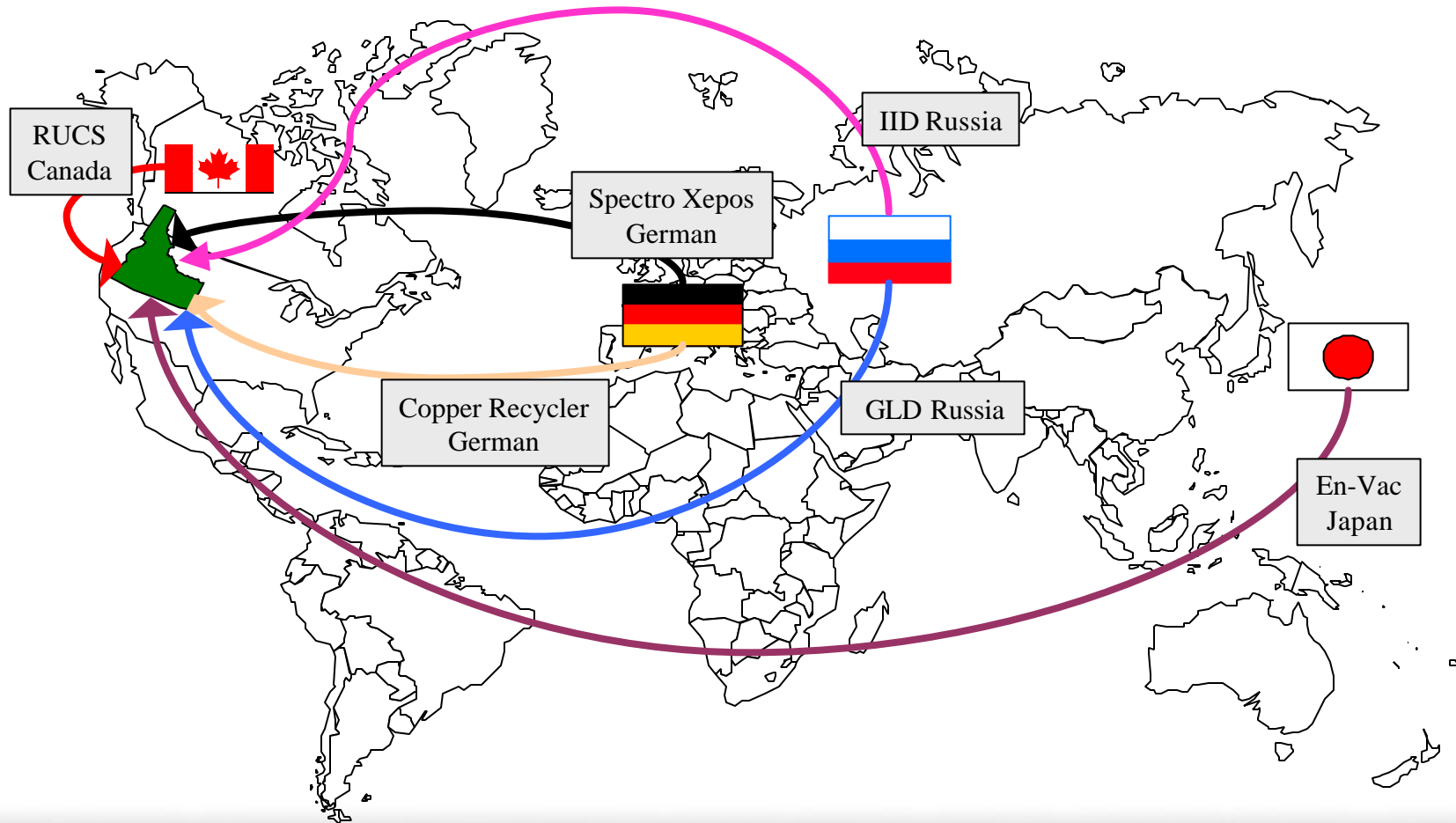
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Non-D&D Industry Technologies



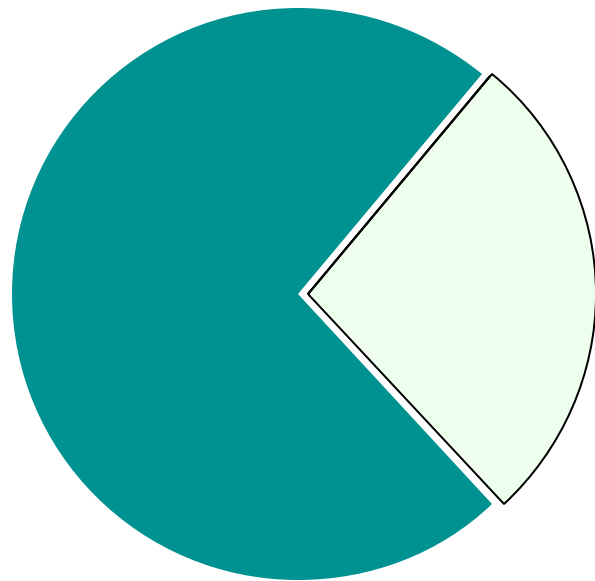
- **Soft Sided Containers** Maritime Shipping
- **Paint Scaler**
- **Excel Scaffolding** }
- **En-Vac** DOD
- **Spectro Xepos** }
- **EMR** Environmental
- **Lead Paint Analyzer** Housing/EPA
- **Copper Recycling** Commercial Utilities

35% of Demonstrated Technologies are from Foreign Countries



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Recycle/re-use Technologies



27%

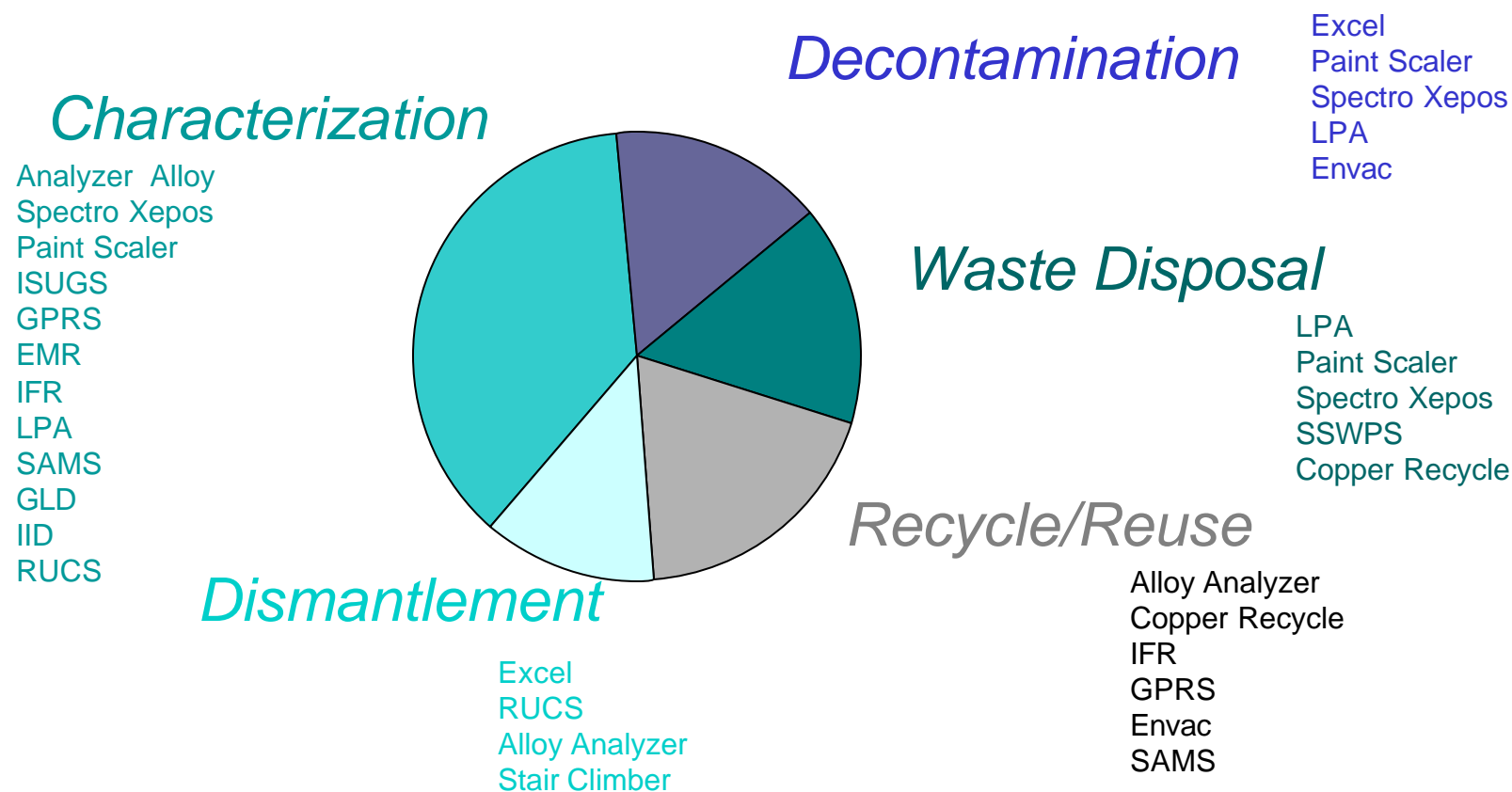
***ISOCS for Free Release
Copper Recycler
GPRS
Alloy Analyzer***

Copper Recycler



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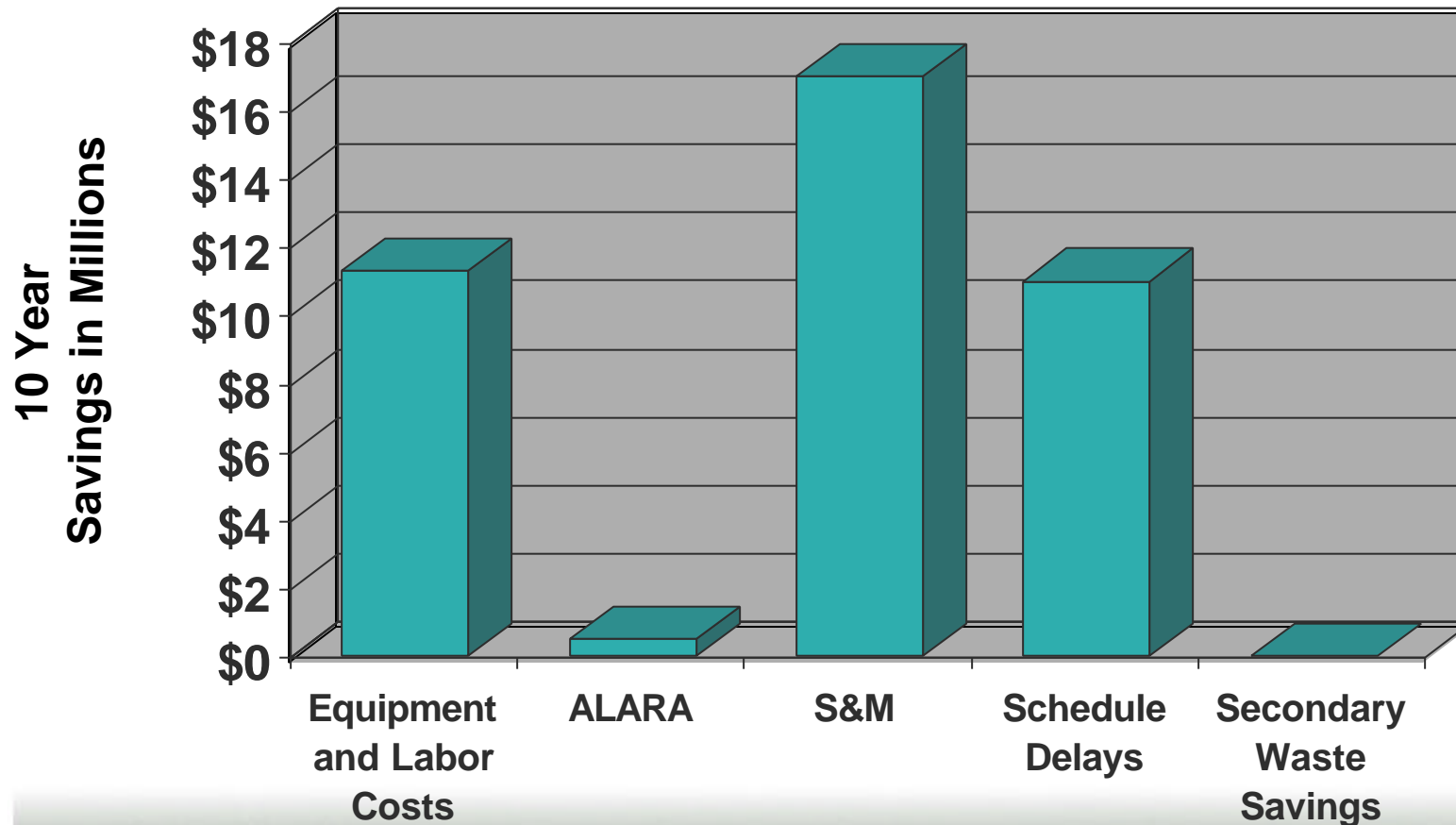
Technologies by D&D Activity



How INEEL LSDDP affected INEEL needs

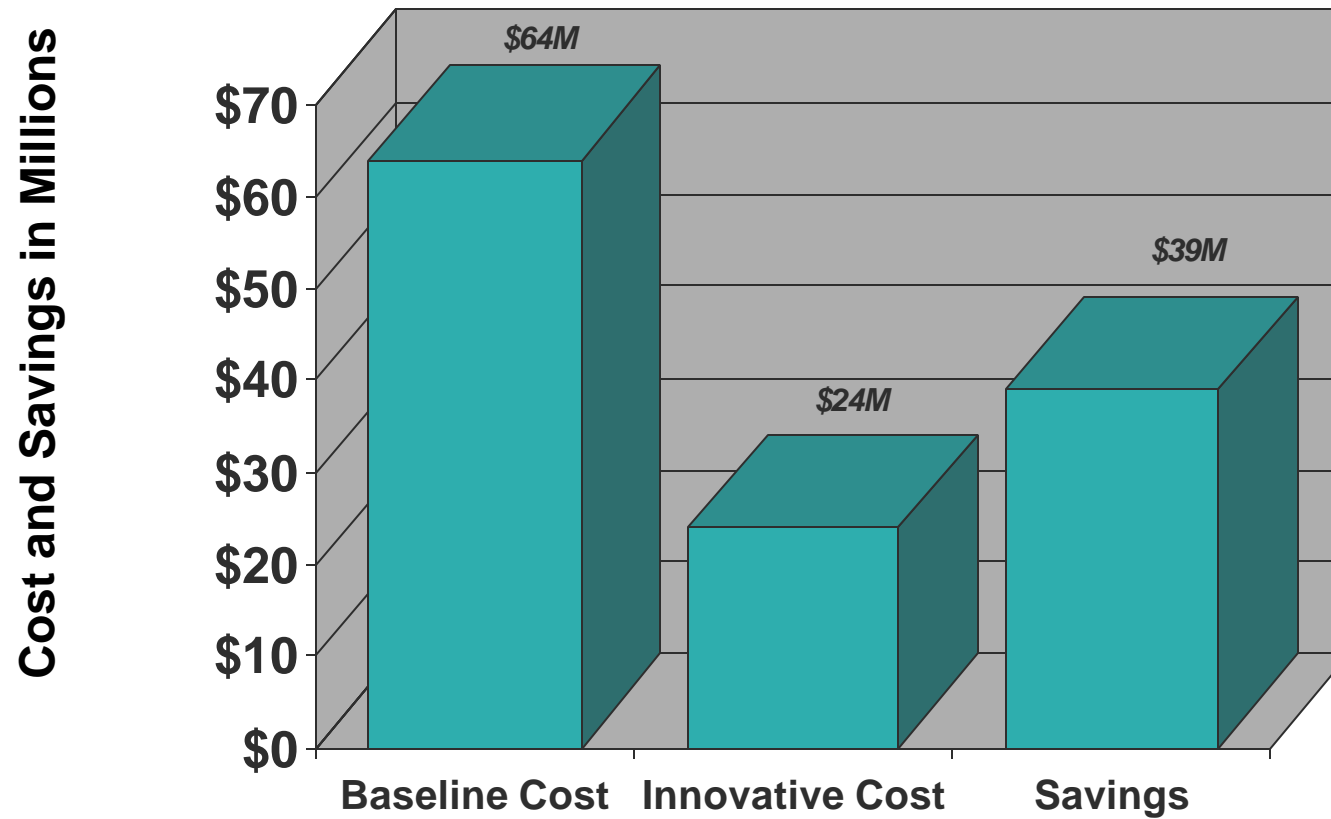
- ***19 needs at start of program***
- ***21 new needs added since startup***
- ***16 needs have been removed or modified as a result of these new technologies***

Cost savings associated with new technologies by savings category

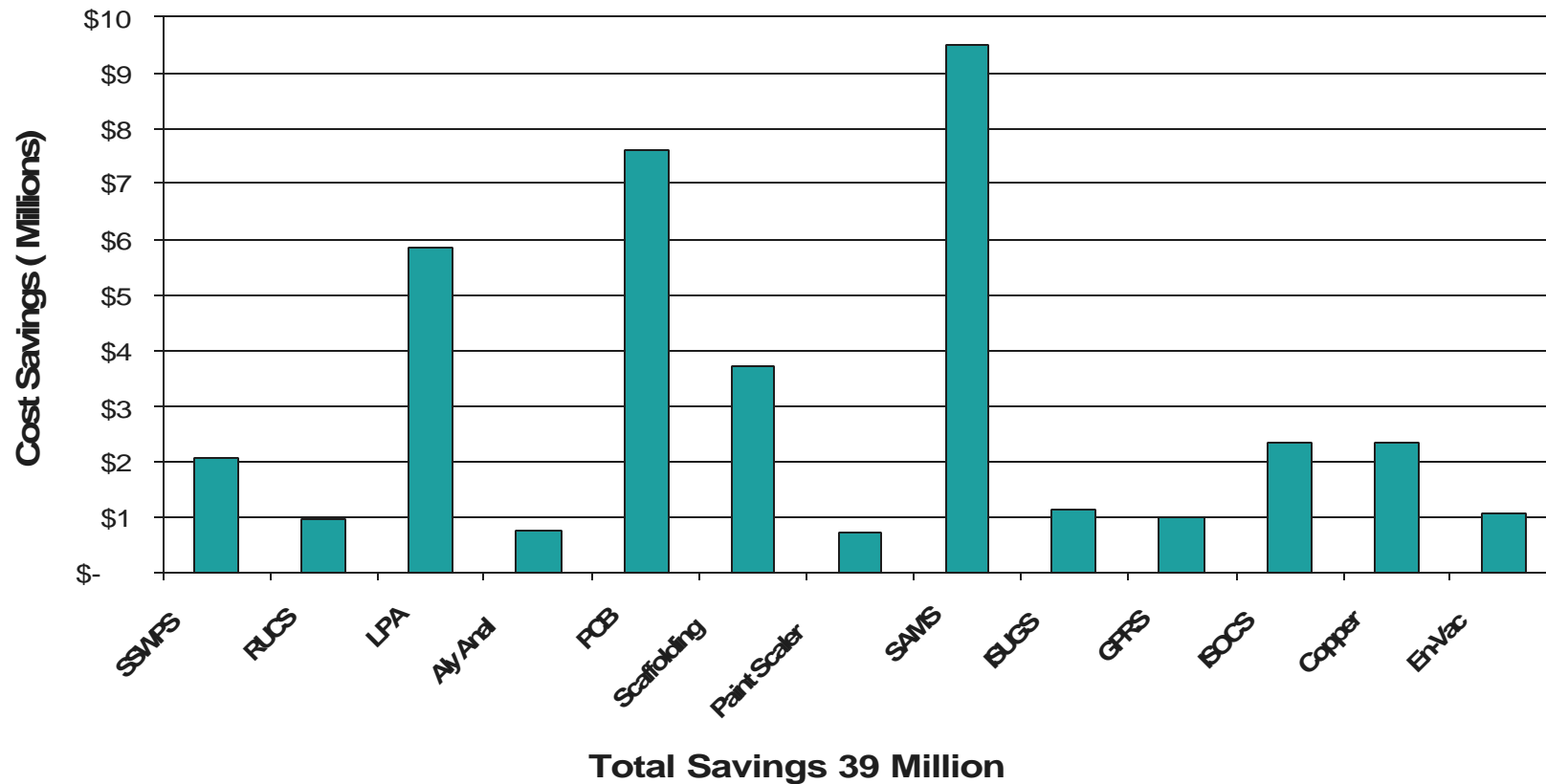


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10-Year Projected Savings



10 Year Cost Savings for Individual Technologies



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Conclusions

- ***INEEL LSDDP has been very successful***
- ***It helped accomplish technology/operation integration***
- ***It removes needs from our STCG needs list***
- ***It has made D&D operations safer, faster, and less expensive***
- ***It has changed the way we do D&D at the INEEL***